A LOOK INTO MONGOLIA'S INFLATIONARY SITUATION

What is Inflation and Overheating?
Inflation is the general rise in the price level. And overheating? Simply put, when the physical capacity of the economy is unable to keep pace with the demand for goods and services.
Is Mongolia in an inflationary phase? Is it overheating? Lets hold back our judgement and look at the key symptoms, which usually are: (i) rising inflation, particularly in non tradables; (ii) rising current account deficits; (iii) substantial increase in liquidity, and (iv) increasing bottlenecks in the economy. Are these symptoms present in Mongolia? Lets take a look.

Inflation is rising. At end-September 2007, the inflation rate measured in terms of the Consumer Price Index (CPI) stood at 13.1 percent year-on-year (yoy), and 12.2 percent since the beginning of 2007—the highest September-level inflation rate one has observed in Mongolia since the beginning of this decade. In January 2007, the inflation rate was 4.2 percent (yoy). In the education sector, public and private university tuition fees have increased by more than 20 percent yoy as of end of September. Hospital services (room charges) were also increased by 76 percent during this same period. In April 2007, water tariffs were adjusted upward by 74 percent, on average. In addition rising wages in the public sector, which act as a benchmark for private sector wages, will tend to push up overall wages in the economy. This means generally rising labor costs and rising incomes.

Consumption is on the increase. The year-on-year inflation rate as of September 2007 shows that 70 percent of the weighted average price increase (i.e. 9 out of 13.1 percentage points) is explained by the increase in food prices. In particular, the price increase of domestically-produced meat accounted for more than 3 percentage points of the observed September 2007 inflation rate (Meat prices have gone up by 21 percent in September (yoy)). Given the absence of any adverse supply shock that one saw in Mongolia in previous years (such as a *dzud*) that may have caused a decrease in Meat supply, the increase in meat prices now is likely to be due to increased demand. Rising fuel and transportation costs are also contributing to the upward pressure on general price levels. Bread and cereals, mostly imported from Russia, contributed to 3.3 percentage points of the year-on-year September inflation rate. Wheat crop domestic production declined in fall 2007 due to drought in the agricultural provinces of Khentii, Selenge, and Tuv aimags, thereby contributing to reducing supply and putting further upward pressure in prices.

This consumption growth will likely be sustained, boosted by (i) expanding government consumption under the form of large past and upcoming increases in public wages and increased universal public social transfers; (ii) sustained remittances from Mongolian working abroad; (iii) a 5 percent VAT cut, effective at the beginning of 2007 combined with unification of the personal income tax at the lowest level of the previous rates (10 percent)[1]. However, higher consumer price inflation will tend to reduce purchasing power and real consumption.

While Government spending has contributed to inflationary pressures by increasing public wages, the net public sector contribution to aggregate demand so far remains limited. The government budget is reporting a surplus in 2006, while in 2007 the net public aggregate spending is likely to remain limited. The government deficit is projected to be around 2 percent.

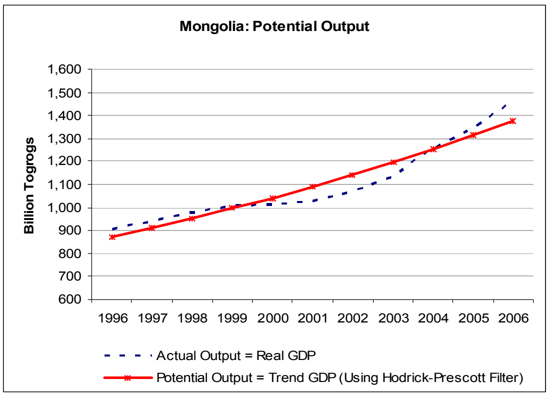
Increasing money supply. This is often a good indicator of inflation over the long term. What makes up money supply? Two simple definitions are narrow money (M1), which represents funds that can be readily used to make transactions (currency+overnight deposits) and broad money

[1] A good proxy for private consumption would be intra-annual income statistics, but there are not available.

(M2), representing cash in circulation plus all deposits. Easy access to money, due in part to foreign direct investment inflows, net international reserves have more than doubled (+132 percent) in August yoy, increasing further liquidities in the economy and workers' remittances from abroad, has been mainly responsible for this increase: M2 now accounts for 41 percent of GDP (end 2006), up from 26 percent of GDP in 2001. This is partly due to increased monetization of the economy. Compared with other similar developing countries, the level of monetization in Mongolia is low. In 2006 for instance, low income countries have on average a ratio of M2 to GDP of 52 percent.

So, it does appear that the main symptoms of inflation are present in Mongolia's economy. But is the situation temporary or a possible longer term issue? To understand this better we need to know what part of the business cycle is Mongolia in? And what is happening in the rest of the world today and what are its neighbors doing?

Mongolia's business cycle is in a boom phase. Production of anything is based on use of capital, labor, technology for which a certain amount of output is produced. This is known as the trend level of output. However at any given time, output does not have to equal its trend value. So if firms do not work at full capacity or efficiently, then output can be below this trend level. However, if firms sense growing profits, they can persuade workers to work overtime, utilize the machines at more than capacity. This cannot be continued forever. But for the time when the firms use the factors or production intensively, output can be above its trend. These fluctuations of output around the trend are what characterize business cycles. The output gap – the distance between potential output and current GDP – is also a measure of business cycles. So, when the output gap is positive and large, GDP exceeds potential output by a large margin. This is because machines are being used more intensively, people are working more, etc. and any additional demand requires firms to increase their output only by increasing overtime, paying higer wages, or utilizing machines beyond full capacity. The firms then pass on this increase by increasing prices. In such a situation inflation is likely to be rising. As seen in the above figure, calculations suggest that the output-gap in Mongolia has turned positive in the past three years.



Aggregate demand growth is and should remain rapid. Looking at investment, evidence suggests that investment is growing rapidly: (i) Industrial output growth is robust, expanding at 13.6 percent constant prices, with manufacturing growing by almost 34 percent (August, yoy); (ii) FDI inflows are sustained; (iii) there is a downward trend in lending interest rates (see Figure 5 above), which contributes to stimulating domestic private investment; (iv) Effective from January 1, 2007, a five percentage point cut in each of the two corporate income tax rates (along with a thirty fold increase in the higher rate's threshold) should stimulate private investment by increasing private return to capital; and (v) finally, the public investment program (PIP) was ambitiously planned to be increased from 7 percent in 2006 to 13 percent of GDP in 2007.

Administrative adjustments in the tariffs of key utilities and basic services have contributed to the CPI increase as well. In the education sector, public and private university tuition fees have increased by more than 20 percent yoy as of end of September. Hospital services (room charges) were also increased by 76 percent during this same period. In April 2007, water tariffs were adjusted upward by 74 percent, on average.

Foreign saving is flowing in Mongolia, which contributes to boost aggregate demand and to increase inflationary pressures. The current account is back into deficit (2nd trimester), with higher imports suggesting a stronger demand for investment and consumption. The trade balance records lower exports mainly coming from a drop in gold official exports in tonnage (- 21 percent yoy) and value (-17 percent yoy)[2]. Higher imports are accompanied by higher FDI (reaching USD128 million in the 2nd trimester, +30 percent yoy). Higher imports may heighten existing infrastructure bottlenecks, in particular in the railway transportation. For example, there has been a marked increase in carried freight turnover at entry (by 19 percent in August yoy). Net international reserves have more than doubled (+132 percent) in August yoy, increasing further liquidities in the economy (Figure).

On the supply side, bottlenecks are increasing. On the domestic front, although within year wage and income data are not available, the following evidence suggests an increasing labor cost in the economy: Rising wages in the public sector, which act as a benchmark for private sector wages, will therefore tend to push up overall wages in the economy. In addition, available indicators suggest an increase in the demand for labor: the number of registered unemployed has decreased by 3.5 percent, while employment in manufacturing has grown by 7 percent in August 2007 (yoy). Production costs for construction have also been pushed up by a short term shortage of cement, which led to a price increase of more than 70 percent since June. This sharp increase was the result of 3 combined factors: (i) China's recent decision to impose an export tariff to the exported cement and steel joist combined; (ii) a short term domestic production shortage (due to renovation of the domestic cement factory) combined with, (iii) a blockage of cement imports at the Chinese border due to a transit issue.[3] On the international front, the recent nominal exchange rate depreciation against major trading partner currencies has also played a role in increasing cost of imported goods (see above). A continued appreciation of the Chinese Yuan will push Mongolian prices further up[4].

What is happening in other countries that are growing fast as well? Take China. It is putting the brakes on lending and thereby cooling investment. Chinese regulators have asked local and foreign banks not to exceed loans outstanding at year end beyond the October 31 levels. Why? A sizzling GDP growth of 11.5% in the first nine months of the year, rising food and fuel prices contributing to inflation which at October end was at 6.5%, a decade high, and fixed asset investment which was 27% more than the figure for last year for the same period, and an increase in M2 by 18.4 percent form the same point last year. India where strong FDI inflows have contributed to a 10 percent appreciation of its currency since January, a projected growth rate of 9.5%, and an increase in money supply at 22 percent this year as compared to the same period last year, are keeping the Indian officials on their toes. To mop up the liquidity the Central Bank of India has raised the reserve ratio (the portion of deposits that banks are required to keep with the Central Bank), issued bonds, and put imposed measures to moderate capital inflows.

Some of the supply side pressures are resulting from global increases in food prices, which have increased 26 percent in the past three years due, in large part, to the rapid increase in the use of food crops to produce bio-fuels.

- The price increases have been largest in crops such as maize (up 40 percent) and vegetable oils such as palm oil (up 55 percent) and soybean oil (up 30 percent) that are used as

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[2] The drop in official gold exports is not necessarily equivalent to a drop of total gold exports, as part of gold exports are likely to be smuggled to avoid paying the "Windfall tax" and benefit from the full untaxed gold price on international markets.

[3] This is one of the policy measures embedded in the new tax law coming into effect in January 2007. Other measures such as the elimination of tax holidays for foreign investors and the introduction of loss-carry forward provisions also contribute to stimulating aggregate supply.

[4] The Togrog had depreciated by 7 percent against the Chinese Yuan as of July 2007.

feedstocks for biofuels, but have also included wheat (up 53 percent) which competes for cropland with maize and some oilseeds.
- The increase in global food prices has been exacerbated by price increases in less heavily traded foods such as meats, fruits and vegetables due to increased costs of production from high fertilizer and energy prices and rapid demand growth in developing countries.

While the overall global index of food prices has increased 26 percent in the past three years, prices of grains, oilseeds and sugar have increased more.
- **Maize** prices have increased about 40 percent as the share of U.S. production allocated to fuel ethanol rose from 11 to 25 percent (5 to 11 percent globally).
- **Palm oil and soybean oil**, which are used for biodiesel, have seen prices increase by 55 and 30 percent, respectively.
- **Sugar** prices rose by 41 percent due partly to their increased use for biofuels, but also due to other factors such as droughts in major producing countries, including Brazil and Thailand.
- Most of the food price increases are confined to food crops used for biofuels, but **wheat** also increased 53 percent because increased plantings of maize and oilseeds displaced wheat and because of droughts in several large wheat exporting countries that contributed to record low world wheat stocks.
- **Rice** has been relatively unaffected by the increased use of food crops for biofuels, but prices increased by 36 percent due to other factors such as the strength of the Thai baht, the Thai government's retention scheme, and to increasing imports from Southeast Asia.

Some final observations:
Putting all of the above together what conclusions can we arrive at?

One major conclusion can be drawn is that the CPI increase and inflation being felt is largely due to relative price changes. So for e.g. the rise in food appears to mainly because of a demand shock (use of grains for bio fuel) while supply constraints as in Oil are also because of demand and supply shocks (war in Iraq, high world growth). This is to be differentiated from an increase in the general price level. Also, the increase in non-tradables for e.g. hospital services, or the rise in school fees, and other charges, are mainly administrative, and as such have little to do with inflation. Simply looking at the CPI may overstate the problem. Relative price changes show up in *measured* CPI increases simply because demand shifts towards the relatively less expensive goods are not captured very well.

The current account deficits emerging are relatively small. The rise in money supply is more worrying. Alongside fiscal policy has been stimulating rather than contractionary – perhaps not the right time for doing so, but also hard to change, for e.g. the tax policy measures.

So to contain demand pressures, the government has the choice to: (i) cut back spending (or lessen the expansion of the Public Investment Program); (ii) allow appreciation of the Togrog, which would slow the imported inflation, and slow liquidity build up; (iii) sterilization of the inflows through higher reserve requirements or open market operations (which will result in higher interest rates and thus lower private spending) can help as well. So, the most important thing for Mongolia today is to try and pace its expansion in a more sustainable manner.[5]

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